Review of: "Estimates of Atlantic Goliath Grouper (Epinephelus Itajara) Bycatch Mortality in Commercial Fisheries of the Southeastern Us From 2002 to 2022"

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This study highlights a very interesting subject with strong implications for tagging studies, recreational activities such as sport fishing, and commercial fisheries. However, the manuscript needs to be improved in several ways before submission.

The introduction has to be developed with increasing information about the species: biology, ecology, geographical repartition, past fisheries interest (recreational and commercial), patrimonial interest linked with conservational status, and importance of the natural and anthropogenic threats facing the Atlantic goliath grouper. For example, the snook (*Centropomus undecimalis*) is mentioned as a contributing factor in the grouper's decline, but you do not explain why. Is it a threat to the grouper's juveniles as a predator?

All the arguments exposed in the introduction will lead to the main objective of your study. Thus, keep the objectives for the final paragraph of the introduction. The title and the objectives cited in the abstract and introduction do not match. In the title, you wish to estimate the mortality induced by bycatch in commercial fisheries. In the abstract, you review the extent of bycatch. Finally, in the introduction, you wish to estimate the proportion of mortality induced by the commercial fishery and contributing to *E. itajara* mortality. The latter implies that you know about the total mortality of the grouper, natural and fisheries induced. The authors need to clarify the use of mortality.

Materials and methods also have to be reworked. The first paragraph concerning the background of the study and data from NOAA has to be completed with essential information such as years of collection and geographical context (maybe a map). The authors have to expand on commercial fisheries in the SEUS, indicating the factual data obtained from NOAA logbooks (number of by-catch of *E. itajira*, number of total fishing trips, etc.). The extrapolation realized with the NOAA bycatch data to assess the total commercial bycatch of *E. itajara* is not clear.

Most of the part 2.3 Relevant literature belongs to the results of the study. Explain in the materials and methods that you conducted a review of the existing literature using keywords that will specify the range of your research (species, areas, years, or topics considered, for example). Figures 1 and 2 could be merged (side by side) and replaced in the results section. They are both issued from the same literature and show a common axis (severity of barotrauma). You just need to fix the Y-axis as Barotrauma and the X-axis as depth for the first and total length for the second. In figure 1, you must specify the meaning of the letters A and B. In figure 2, change "standard length" to "total length" in the caption.

The authors have to demonstrate a clear explanation of the results obtained in the Gag grouper capture-mark-recapture study in order to understand why the resulting equation for the mortality of the Gag grouper can be utilised as a proxy for the goliath grouper's (close biology and physiology between species, assuming similar responses to pressure variation?). There are several assumptions made throughout the manuscript and frequent uses of proxy which are not clearly justified.

Equations used throughout the manuscript should be cited, but in the body of the text instead of in the figures' captions, first in the materials and methods, and then in the results with the specific data used.

I don't really understand the meaning of each dot in figure 5. Does each dot correspond to a unique fishing trip? It could be easier to illustrate this figure using a barplot.

Tables 1 and 2 could also be merged. You should rearrange the order of columns and preferably represent proportions with percentages. All the assumptions that you made and the matching calculations have to be explained first in the materials and methods (assumed proportions of fish with no capture depth data, for example).

There is a general need to review the English of the whole manuscript and to use adequate and precise terms. Sentences are sometimes too long or complicated, leading to a lack of coherence or misunderstandings. There are a lot of typing errors such as additional spaces or commas, errors in the citation of the bibliography, and in scientific names of the species. You need to be consistent throughout your manuscript.

To conclude, even if the manuscript has to be strongly improved before any submission, this study is important to publish for *E. itajara* conservation, given the change of IUCN Red List threats and recent management decisions to open the fishery for juveniles of *E. itajara*.